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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/662,492	09/15/2000	J. Keith Kelly	6945.002.00	3670

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EXAMINER

GART, MATTHEW S

ART UNIT PAPER NUMBER

3625

DATE MAILED: 11/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/662,492

Applicant(s)

KELLY ET AL.

Examiner

Matthew s Gart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) 21-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1-20 are pending in the instant application. Claims 21-33 were withdrawn from further examination via Paper No. 4.

Drawings

The drawings were received on 9/10/2004. The Examiner accepts these drawings.

Claim Rejections - 35 USC §101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requires of this title.

Claims 1-12 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

As an initial matter, the United States Constitution under Art. I, §8, cl. 8 gave Congress the power to "[p]romote the progress of science and useful arts, by securing for limited times to authors and inventors the exclusive right to their respective writings and discoveries". In carrying out this power, Congress authorized under 35 U.S.C. §101 a grant of a patent to "[w]hoever invents or discovers any new and useful process, machine, manufacture, or composition or matter, or any new and useful improvement thereof." Therefore, a fundamental premise is that a patent is a statutorily created vehicle for Congress to confer an exclusive right to the inventors for "inventions" that promote the progress of "science and the useful arts". The phrase "technological arts" has been created and used by the courts to offer another view of the term "useful arts". See *In re Musgrave*, 167 USPQ (BNA) 280 (CCPA 1970). Hence, the first test of whether an invention is eligible for a patent is to determine if the invention is within the "technological arts".

Further, despite the express language of §101, several judicially created exceptions have been established to exclude certain subject matter as being patentable subject matter covered by §101. These exceptions include "laws of nature", "natural

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phenomena", and "abstract ideas". See *Diamond v. Diehr*, 450, U.S. 175, 185, 209 USPQ (BNA) 1, 7 (1981). However, courts have found that even if an invention incorporates abstract ideas, such as mathematical algorithms, the invention may nevertheless be statutory subject matter if the invention as a whole produces a "useful, concrete and tangible result." See *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* 149 F.3d 1368, 1973, 47 USPQ2d (BNA) 1596 (Fed. Cir. 1998).

This "two prong" test was evident when the Court of Customs and Patent Appeals (CCPA) decided an appeal from the Board of Patent Appeals and Interferences (BPAI). See *In re Toma*, 197 USPQ (BNA) 852 (CCPA 1978). In *Toma*, the court held that the recited mathematical algorithm did not render the claim as a whole non-statutory using the Freeman-Walter-Abele test as applied to *Gottschalk v. Benson*, 409 U.S. 63, 175 USPQ (BNA) 673 (1972). Additionally, the court decided separately on the issue of the "technological arts". The court developed a "technological arts" analysis:

The "technological" or "useful" arts inquiry must focus on whether the claimed subject matter...is statutory, not on whether the product of the claimed subject matter...is statutory, not on whether the prior art which the claimed subject matter purports to replace...is statutory, and not on whether the claimed subject matter is presently perceived to be an improvement over the prior art, e.g., whether it "enhances" the operation of a machine. *In re Toma* at 857.

In *Toma*, the claimed invention was a computer program for translating a source human language (e.g., Russian) into a target human language (e.g., English). The court found that the claimed computer implemented process was within the "technological art" because the claimed invention was an operation being performed by a computer within a computer.

The decision in *State Street Bank & Trust Co. v. Signature Financial Group, Inc.* never addressed this prong of the test. In *State Street Bank & Trust Co.*, the court found that the "mathematical exception" using the Freeman-Walter-Abele test has little, if any, application to determining the presence of statutory subject matter but rather, statutory subject matter should be based on whether the operation produces a "useful, concrete and tangible result". See *State Street Bank & Trust Co.* at 1374. Furthermore, the court found that there was no "business method exception" since the court decisions that purported to create such exceptions were based on novelty or lack of enablement issues and not on statutory grounds. Therefore, the court held that "[w]hether the patent's claims are too broad to be patentable is not to be judged under §101, but rather under §§102, 103 and 112." See *State Street Bank & Trust Co.* at 1377. Both of these analysis goes towards whether the claimed invention is non-statutory because of the presence of an abstract idea. Indeed, *State Street* abolished the Freeman-Walter-Abele test used in *Toma*. However, *State Street* never addressed the second part of the analysis, i.e., the "technological arts" test established in *Toma* because the invention in *State Street* (i.e., a computerized system for determining the year-end income, expense, and capital gain or loss for the portfolio) was already determined to be within the technological arts under the *Toma* test. This dichotomy has been recently acknowledged by the Board of Patent Appeals and Interferences (BPAI) in affirming a §101 rejection finding the claimed invention to be non-statutory. See *Ex parte Bowman*, 61 USPQ2d (BNA) 1669 (BdPatApp&Int 2001).

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In utilizing the two-prong test as set forth above, the instant invention as a whole must accomplish a practical application (First Prong). The Examiner notes, claims 1-12 satisfy the first prong because they produce a useful, concrete and tangible result.

Continuing with *Toma's* "technological arts" analysis, claims 1-12 are not within the "technological art," (Second Prong) because the claimed invention is not an operation being performed by a computer within a computer. Claim 1 recites the execution of an algorithm for generating therefrom instructions for choosing a pesticide, but the computer does not explicitly perform the execution. If claim 1 was amended to explicitly recite the computer performing the execution, *Toma's* second prong of the test would be satisfied and the rejection vacated.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1-20 are rejected under 35 U.S.C. 102(a) as being anticipated by Cppress.com (PTO-892, Ref U).

Referring to claim 1. Cppress discloses a method of providing information on pesticides, comprising inputting into a computer:

- The identity of a pest existing on a property (Page 10, Quickly search the indexes by multiple pests...");
- The identity of a plant or crop existing on the property, wherein said plant or crop is adversely affected by said pest (Page 10, "Indexes include all labeled plant and pest species");
- The location of the property (Page 10, "sites"); and
- Executing an algorithm for generating therefrom instructions for choosing a pesticide registered in said location to protect said plant or crop from said pest (Page 10, "Display and print product summaries" and Page 3).

The Examiner notes, the information inputted (identity of a pest and identity of a crop) is not necessarily linked to the information generated via the algorithm. The

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algorithm could be based and generated from a plurality of inputted information and not necessarily limited to the information inputted in steps 1, 2, and 3 of claim 1.

The Examiner further notes, Cppress utilizes an "Electronic Pesticide Reference" in order to locate plant protection products. The "Electronic Pesticide Reference" includes interactive indexes and product summaries. These indexes are labeled by plant species and pest species. In order for a consumer to find a suitable plant protection product, they would first locate on the indexes the particular plant they are seeking protection for. Once the plant is identified, the computerized interactive indexes can be quickly searched via pest, site and classification. The input of this information results in a computerized searching algorithm, which displays plant protection product recommendations. The searching algorithm is functionally equivalent to the algorithm claimed in the instant application. In both cases a user inputs information and receives a product recommendation.

Referring to claim 2. Cppress further discloses a method wherein said instructions allow for a comparison of different products (page 1).

Referring to claim 3. Cppress further discloses a method wherein the instructions provide access to a material safety data sheet (Page 3, "Agricultural Services").

Referring to claim 4. Cppress further discloses a method comprising obtaining the product by sale on-line (Page 2, "Greenbook Website").

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Referring to claim 5. Cppress further discloses a method wherein the algorithm initiates an analysis of restrictions on the sale of the pesticide (Page 1, "Indexes flag products that are Restricted Use").

Referring to claim 6. Cppress further discloses a method wherein analysis includes validating information regarding a pesticide applicator (Page 8 and Page 9).

Referring to claim 7. Cppress further discloses a method wherein the analysis includes validating information regarding a pesticides dealer (Page 5).

Referring to claim 8. Cppress further discloses a method wherein information regarding an on-line sale of the product is entered into a central database (Page 2, "Greenbook Website").

Referring to claims 9-12. Cppress further discloses a method comprising accessing a farm-planning guide to assist a user in optimizing crop yield, providing information regarding seeds, and providing information regarding fertilizers (Page 3, "Agricultural Services").

Referring to claim 13. Claim 13 is rejected under the same rationale as set forth above in claim 1.

The Examiner notes, Cppress inherently teaches a memory storing a plant database, a pest database, a pesticide database, a location database, and a processor configured to generate instructions. As taught in Cppress, the "Electronic Pesticide Reference" is available on CD-ROM or 3.5" diskettes for DOS or Windows platforms ("Network" programming available upon request). A CD-ROM is inherently known as a type of optical disk capable of storing large amounts of data. A single CD-ROM has the

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storage capacity of up to 700 floppy disks, enough memory to store about 300,00 text pages. CD-ROMs are particularly well suited to information that requires large storage capacity. This includes large software applications.

Referring to claim 14. Claim 14 is rejected under the same rationale as set forth above in claim 5.

Referring to claim 15. Claim 15 is rejected under the same rationale as set forth above in claim 6.

Referring to claim 16. Claim 16 is rejected under the same rationale as set forth above in claim 7.

Referring to claim 17. Cppress further discloses a method wherein the memory further stores a central database of pesticides according to geographical areas (Page 6, "Indexes flag Restricted Use Products, and those not registered in California").

Referring to claims 18-20. Claims 18-20 are rejected under the same rationale as set forth above in claims 9-12.

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Response to Arguments

Applicant's arguments filed 9/10/2004 with respect to claims 13-20 concerning the rejection set forth under 35 U.S.C. 101 is persuasive. Applicant's arguments filed 9/10/2003 concerning the other outstanding rejections have been fully considered but are moot in view of the new grounds for rejection.

The Examiner has provided previously to the applicant particular printed pages in the reference as applied to the claims for the convenience of the applicant. Although the specified pages are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other pages may apply as well. The Examiner has provided a newly discovered website printout labeled page 10 as an addendum to the Cppress prior art reference previously relied on. Page 10 further expands upon the "Electronic Pesticide Reference" as taught by Cppress.

Conclusion

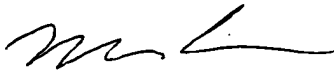
Any inquiry concerning this communication should be directed to Matthew Gart whose telephone number is 703-305-5355. This examiner can normally be reached Monday-Friday, 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Wynn Coggins can be reached on 703-308-1344. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

A handwritten signature in black ink, appearing to be 'mL' or similar, written in a cursive style.

MSG
Patent Examiner
November 9, 2004